DOCUMENT RESUME

ED 314 897 EC 222 055

TITLE	The Program Effectiveness in Special Education Task Force Report. Model for Program Quality in Special Education.
INSTITUTION	California State Dept. of Education, Sacramento. Div. of Special Education.
PUB DATE	Sep 88
NOTE	53p.; For other reports in this series, see EC 222 053-056.
AVAILABLE FROM	Resources in Special Education, 900 J St., Sacramento, CA 95814-2703 ($8.00).
PUB TYPE	Viewpoints (120) -- Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Curriculum; *Disabilities; Educational Philosophy; Educational Policy; Educational Practices; Elementary Secondary Education; Models; Outcomes of Education; *Program Effectiveness; *Special Education; State Standards; Student Development; Student Educational Objectives
IDENTIFIERS	*California

ABSTRACT

The report summarizes findings and recommendations of a California Task Force on Program Effectiveness in Special Education. The 30 Task Force members ("stakeholders" in special education) were divided into committees to address four goals: (1) identify the mission of special education and describe the context in which special education programs operate; (2) delineate major desired outcomes for handicapped students; (3) specify effectiveness indicators for special education programs; and (4) recommend procedures for determining and ensuring special education program effectiveness. A conceptual model was adopted with planning-evaluation cycles, evaluation of student outcomes, and relationships between effectiveness indicators and student outcomes. The mission of special education is defined, and the provision of programs that increasingly lead to improve student outcomes is identified as central. The section on the context of special education notes demographic trends, economic climate, and educational policy issues. Twenty-two effectiveness indicators are identified, clustered into the categories of curriculum, instructional setting, and instructional processes. Desired student outcomes are organized into developmental/academic factors, personal/social achievements, and community/economic factors. Finally, the major goals and 20 recommendations are offered. Appendixes provide information on effectiveness indicators and norm-referenced testing. Eleven references are provided. (DB)

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THE PROGRAM EFFECTIVENESS IN SPECIAL EDUCATION TASK FORCE REPORT

Model for Program Quality In Special Education

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An Advisory Report to Patrick Campbell, Assistant Superintendent
California Department of Education
Special Education Division

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September 1988

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Model for Program Quality In Special Education

An Advisory Report to Patrick Campbell, Assistant Superintendent
California Department of Education
Special Education Division

From
The Task Force on
Program Effectiveness in Special Education
September 1988

This publication was edited and prepared for photo-offset production by Resources in Special Education (RiSE) under the direction of the Program, Curriculum, and Training Unit, Special Education Division, California State Department of Education.

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Acknowledgements

In February 1987, Patrick Campbell, Assistant Superintendent, California State Department of Education, appointed over 30 stakeholders in special education to the Task Force on Program Effectiveness. Included were Special Education Local Plan Area (SELPA) directors, special education teachers, state consultants, program coordinators, program specialists, district directors of special education, special education administrators of county offices, professors, parents, directors of private schools, assistant and associate superintendents of local education agencies, program evaluators, speech and hearing therapists, nurses, occupational therapists, school psychologists, physical therapists and resource specialists.

Most of these individuals remained with the Task Force for the full duration of its 15 months of meetings, investigations and report writing. They served on one of four committees (*mission and context, effectiveness indicators, outcomes, and evaluation*), each of which was chaired by a member of the Task Force Steering Committee. The Steering Committee assumed primary responsibility for pulling together these separate reports into this advisory report.

The Task Force was assisted by expert consultation from Lalit Roy (California State Department of Education), Dr. Joe Jenkins (University of Washington) and Dr. Rena Lewis (San Diego State University).

To each of the task force members, the steering committee and the consultants, I express my heartfelt appreciation for the level of your energy, for your tenacity and for the quality of your effort.

Patricia Thomas Cegelka
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Introduction

The Task Force on Program Effectiveness in Special Education, appointed by Patrick Campbell, Assistant Superintendent of the California State Department of Education, was charged with developing a conceptual framework for planning and evaluating the quality of special education programs and services across the state. Task Force members represented a broad cross section of special education "stakeholders" within California. Included were SELPA directors, special education teachers, state consultants, program coordinators, district directors of special education, special education administrators of county offices, program specialists, speech and language specialists, professors, parents, directors of private schools, assistant and associate superintendents of local education agencies, program evaluators, nurses, occupational therapists, school psychologists, physical therapists and resource specialists. Several of the members served as designated representatives of various associations and commissions; others were selected to represent the general field of special education.

These members were divided into four committees structured around the major goals identified by the Task Force. These goals were as follow:

1. Identify the *mission* of special education and describe the *context* in which special education programs operate.

   Special education programs are developed in response to a particular mission and operate in a complex of contextual variables that affect the nature and success of service delivery. The mission and context of special education provide a background against which to plan and evaluate programs for students with handicapping conditions.

2. Delineate major desired *outcomes* for handicapped students.

   The central focus of program effectiveness must be on the expected results or outcomes for the students. Specification of broad student outcomes represents the core of the conceptual model developed by the Task Force.

3. Specify *effectiveness indicators* for special education programs.

   Research and policy formulations within general and special education, as well as existing listings of quality indicators, are sources for identifying program characteristics associated with effective special education.

4. Recommend *procedures* for determining and ensuring special education program effectiveness in California.

   Using the conceptual model for program effectiveness as a basis, the Task Force recommendations to the State Department of Education set the direction for future planning and evaluation of special education and related services.

The work of these committees, over a 15 month period of time, has resulted in the development of a model for quality special education. This model provides a conceptual basis for evaluating special education programs and services.

This advisory report from the Task Force describes the conceptual model in detail. The first chapter presents a schematic of the model and briefly outlines the key features of this schematic. The next four chapters delineate these features: the mission of special education, the context in which special education operates, effectiveness indicators, and targeted student outcomes. The final chapter includes recommendations from the Task Force on Program Effectiveness to the Division of Special Education, California Department of Education, for adopting and implementing the Model for Program Quality in Special Education.

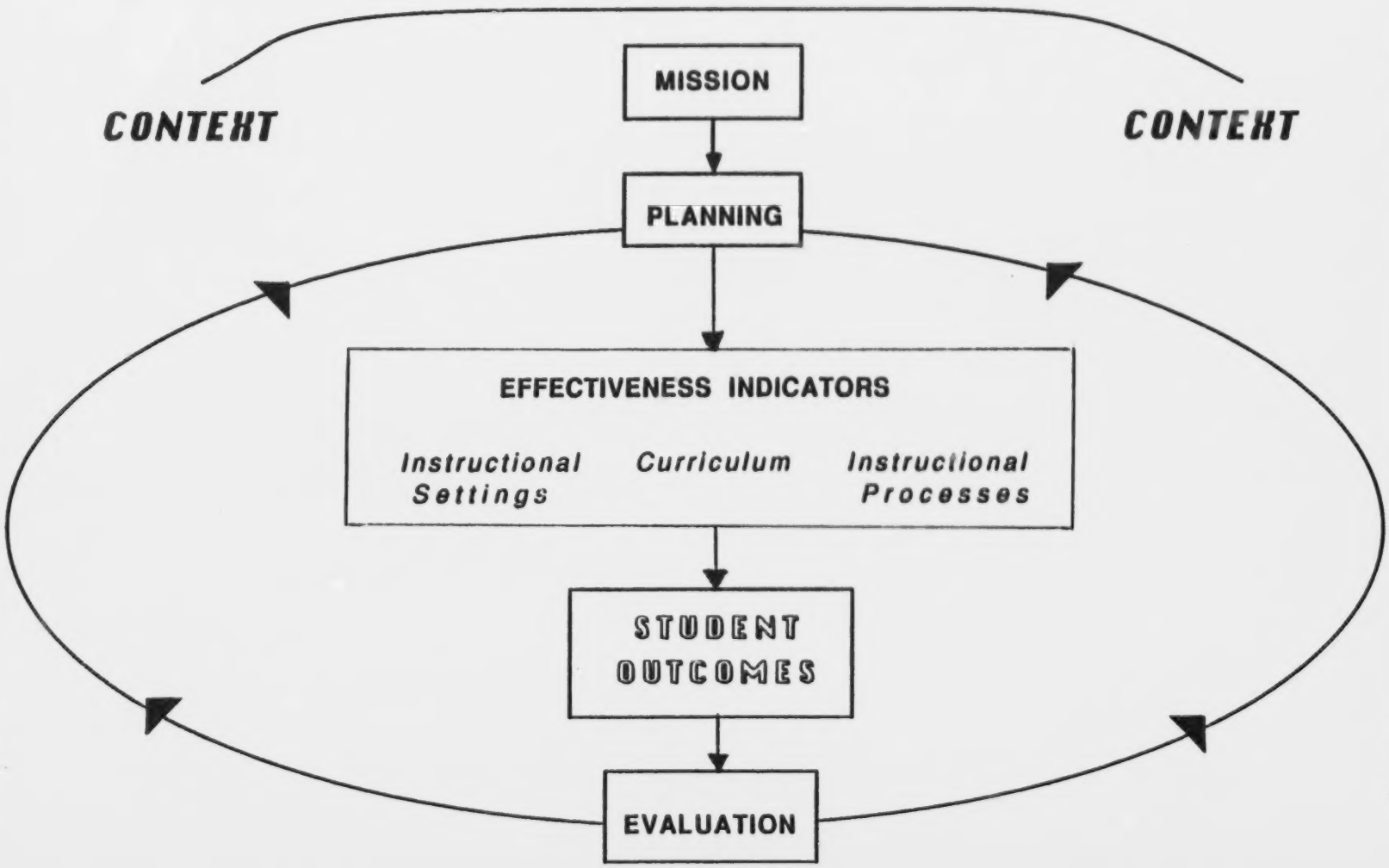
Conceptual Model for Quality Special Education

The Task Force was charged with developing a model to use in determining to what extent special education is achieving its mission. One type of evaluation model the Task Force might have suggested would involve identifying a series of "tests" to be administered to various parts of the special education system, specifying how the test results should be interpreted, and perhaps, prescribing how and to whom the results were to be reported. This univariate approach to special education evaluation has the potential of establishing a sort of general health screening of the system and might, depending on the results, be useful in generating future support of special education from the legislature and the general community. "One-shot" models run the risk, however, of merely showing that the system is or is not achieving its stated mission and goals. They do not provide direction for needed program improvements and they are particularly poor choices for establishing the effectiveness of innovative practices.

Because improvement in special education is likely always to be a goal, the Task Force adopted a model in which planning and evaluation are intimately tied to program and in which the focus is on student outcomes. A schematic of the conceptual model developed by the Task Force is presented in Figure One. Emphasized in the schematic are the key elements that characterize quality special education programs. These elements include: (a) planning-evaluation cycles; (b) an emphasis of evaluation on student outcomes; and (c) a relationship between effectiveness indicators and student outcomes. The program model exists within a a context of internal and external variables that affect how special education programs are planned, managed and evaluated. These variables include such considerations as social/political factors, demographic trends, the economic climate and educational policy issues, among others. The planning and evaluation cycles respond to an enduring program mission which underlies the development of special education programs and services for students with handicaps.

FIGURE ONE

CONCEPTUAL MODEL FOR QUALITY SPECIAL EDUCATION



Planning-Evaluation Cycles

Systematic planning-evaluation is a critical feature of this program quality model. In the view of the Task Force, quality special education programs are those which continually improve on the basis of built-in planning and evaluation processes. In its emphasis on continued planning and evaluation, the Task Force's model differs rather dramatically from many program evaluation models, including the "one-shot" model previously described. The approach presented here conceptualizes evaluation not as a requirement imposed on the special education system, but as a continuous and systematic aspect of the system. Implicit here is the idea that effectiveness in special education is not something that is *accomplished;* rather, it is a continuous state of *achieving*.

Although Figure One depicts a single planning and evaluation cycle, the Task Force conceptualized the planning and evaluation as involving multiple, overlapping cycles. This differs dramatically from perspectives of evaluation as an occasional, a periodic, or a terminal event. For instance, current Program Quality Reviews and Coordinated Compliance Reviews, conducted by the California State Department of Education, are either annual or triennial. Although such long term cycles seem to be appropriate for certain questions, they clearly are not appropriate for others. This is particularly true if planning-evaluation is viewed as a continuous aspect of quality special education. At the individual student level, for example, planning and evaluation should include, but not be limited to, the annual individualized education program (IEP) cycle. Certain goals will require weekly evaluation cycles and some may require even shorter cycles. Similarly, at the school-site level, goals such as those having to do with the school climate are not likely to be appropriately implemented if the planning-evaluation cycle is annual. It may be that monthly cycles would better address these concerns. In other words, planning-evaluation should be a central feature of special education, with the duration of planning-evaluation cycles being appropriate to the questions to which planning-evaluation is addressed.

Student Outcomes

The emphasis of evaluation, as conceptualized in the Model for Quality Special Education, is on student outcomes. The model is not specifically concerned with the evaluation of compliance with legislative guidelines, nor is it primarily concerned with the evaluation of educational policies and practices. Instead, the emphasis is on the *product* of special education. Are students acquiring the knowledge and skills they need to succeed both in and out of school? Focusing as it does on student outcomes, the model is closely articulated with the mission of special education as well as the current national emphasis on accountability in the schools.

The model's emphasis on student outcomes encompasses measures throughout the student's formal education as well as at program completion. The dual focus is on what students are doing *in* school and what they are prepared to do after *leaving* school. Included are achievement in all curricular areas as well as such considerations as the extent to which students like schooling and the extent to which they attend school. At the post-secondary level, attention is directed to what students actually do after leaving school. In other words, measures of both short-range and long-range outcomes are the indices of program effectiveness that constitute the focus of planning and evaluation cycles.

Short-range outcomes include those that teachers, parents and others could determine on a daily or weekly basis. They revolve around such questions as the following:

- Is the student achieving objectives consistent with his/her Individualized Education Program (IEP) goals?
- Does the student have appropriate access to general education programs and/or interactions with non-handicapped peers?
- Is the student's program appropriately aligned to the district's course of study?
- Is the student acquiring increasingly complex concepts and behaviors?

Student success in achieving short-range outcomes should be predictive of attaining the more long-range, or terminal, goals and objectives. Relevant summative evaluation questions as students approach and enter adulthood might include:

- Has the student attained a reasonable level of independence?
- Is the student prepared to participate in integrated adult environments?
- Has the student met minimum proficiency standards?
- Has the student attained a high school diploma or other form of recognition for program completion?
- Does the student display appropriate levels of achievement in the community? Does he/she work, pay taxes, live independently, contribute to the community, demonstrate good citizenship, maintain self-esteem?
- Does the student seek additional educational opportunities?

Effectiveness Indicators

The Task Force's model also emphasizes the relationships between certain special education practices, called *effectiveness indicators*, and student outcomes. Such effectiveness indicators are more or less continuously being discovered, refined, and reported in professional publications. Practices are regarded as effectiveness indicators when they consistently contribute to improved student outcomes. Loosely speaking, effectiveness indicators may be thought of as independent variables that influence student outcomes, the dependent variables. Certain evaluation measures, including the Program Quality Review of the State Department of Education, the Los Angeles County *Characteristics of Effective Special Education Programs* (1986), and the MidSouth Regional Resource Center's *Effectiveness Indicators in Special Education* (1986) concentrate on whether schools and school districts have these indicators in place.

The Task Force model focuses on student outcomes, with the presumption that effectiveness indicators contribute to these outcomes. When program evaluation data

reveal that programs are not attaining targeted student outcomes, special educators should search out descriptions of effectiveness indicators, including the listing that appears later in this document. From these listings practices can be identified which, if implemented properly, would greatly improve student outcomes. Further, effectiveness indicators should be viewed as practices which are neither perfectly correlated with student outcomes nor implemented in precisely the same way time after time. Consequently, to the extent possible, all such practices should be tailored to the specific setting or situation and continued only as long as justified by student outcome evaluations. Finally, special educators should systematically describe and evaluate their own practices, retaining only those that yield desirable student outcomes.

Program effectiveness indicators can be studied through formative evaluation, involving self-study and/or independent review teams, which describe program characteristics and determine the extent to which key effectiveness indicators are in place. This level of evaluation can address such issues as what are the features of the program, what relationships can be documented between the effectiveness indicators and expected learner outcomes, and to what extent student outcomes influence program practices.

The Mission of Special Education

The mission of education in American society has traditionally been to inculcate the social and cultural mores and values of the society and to provide the opportunity for social and economic mobility of its citizens. This mission, and the educational objectives that articulate it, is based on the democratic ideal that all individuals have a right to an education that will enable them to achieve their maximum potential. Public Law 94 -142, the Education for All Handicapped Children Act, embodies this philosophy. It states:

> *It is the purpose of this Act to assure that handicapped children have available to them . . . a free, appropriate public education which emphasizes special education and related services designed to meet their unique needs, to assure that the rights of handicapped children and their parents or guardians are protected, to assist states and localities to provide for the education of all handicapped children and to assess and assure the effectiveness of efforts to educate handicapped children.*

The wording of California's Education Code 56001(a) reflects a similar commitment:

> *Each individual with exceptional needs is assured an education appropriate to his or her needs in publicly supported programs through completion of his or her prescribed course of study or until such time that he or she has met proficiency standards . . . .*

This commitment is supported by the California Special Education Division's articulation that its mission is to provide leadership and assistance to ensure that a "free, appropriate, and quality public education prepares all students with exceptional needs for employment, citizenship, independent living, and personal, academic and social growth."

The Task Force identified as a central mission of special education the provision of programs that increasingly lead to improved student outcomes. These programs may be provided through a continuum of service delivery options, ranging from highly

segregated to fully integrated settings. The placement of individual students along this continuum will vary with the nature and the severity of the handicapping condition. For some, special education will be provided in the form of support services to the general class program, with the curricular objectives and content identical to that of general education. For others, special education may require the reformulation of educational objectives and content and may involve delivery of programs away from the regular classroom environment.

In 1987, Thomas Bellamy, Director of Special Education Programs of the U.S. Office of Special Education and Rehabilitative Services, emphasized that special education reflects a particular value system with implicit purposes and goals. He recommended that the effectiveness of special education be assessed relative to the extent to which handicapped students leave school with the same options as everyone else: 1) vocational success; 2) a reasonable place to live; and 3) a friendship network. Bellamy concluded that data in these three areas, plus reductions in special education dropouts, would indicate that special education is a good place in which to invest money for the handicapped. For handicapped students, therefore, the long-range purpose and mission of special education remains the same as that for all of education, namely to maximize the potential of individuals to participate in and make contributions to our social system, and to do so as independently as possible.

The Context in Which Special Education Operates

Special education, as well as general education, exists within a context of complex social/political, demographic, economic and educational policy variables. The extent to which either special or general education is able to fulfill its mission and attain its goals is influenced by these attitudes, values, policies and trends. Factors such as demographic changes, economic recession or depression, changing roles for education, fiscal support for education and technological advances are but some of the issues that affect the extent to which special education can be effective in achieving its mission. It is within this broad context that the mission of special education is formulated, program goals implemented, and program planning and evaluation conducted.

Demographic Trends

Numerical, ethnolinguistic and social-economic changes in the population bring pressures to bear on all aspects of public education. Sizeable increases in the numbers of school-age children who are from diverse linguistic and cultural groups are occurring. Already more than 50 percent of the students in the K-3 classrooms in California are from non-majority group backgrounds (California State Department of Education, 1986). In addition to a growing Hispanic population, there are large numbers of children from Pan-Pacific and Middle Eastern backgrounds. It can be expected that the proportion of children from these groups that qualify for special education services will be approximately the same (about ten percent) as for the general population. However, in neither general education nor special education are there the numbers of bilingual/bicultural professional personnel or the proven curricula and strategies to ensure full educational opportunity for these diverse groups. These variables attenuate student outcome attainment for both handicapped and non-handicapped minority group students.

Other changes in the population that are bringing pressures to bear on public education include the increased numbers of 1) teenage pregnancies and drug/alcohol dependent mothers, 2) infants born without benefit of prenatal care, and 3) the increasing proportion of children who live in poverty (*Education Week*, 1988). These are all factors associated with increased risk for birth defects and handicapping conditions. Further, improvements in medical technology and care are resulting in increased numbers of premature/low weight infants and multiply handicapped infants who survive. All these factors in combination mean that there is an increasing need for educational support services, although, in recent years, budget constraints have resulted in reductions in these support services in many districts.

Expanded conceptualizations of least restrictive environment and the movement toward deinstitutionalization and community-based living have meant that schools are providing programs for students with a broader range of handicapping conditions and severity of disabilities than in the past. At the same time, the extension of special education services at both ends of the age continuum, e.g., transition services into early adulthood and intervention programs to at-risk infants and children, represent an additional increase in the special education population. These considerations all have an impact on the planning and evaluation process.

Economic Climate

The general economic picture of the state and nation strongly influences program effectiveness. It affects the fiscal support for education programs in general and for compensatory and similar education support programs in particular. Factors such as class size, the availability of special programs and equipment and the recruitment of credentialed teachers are affected. In addition, economic indicators affect the availability of jobs, the discretionary income that individuals enjoy, the numbers of those who live in poverty, and other quality of life factors.

Clearly, the criteria for successful or effective educational programs vary with the fiscal health of society in general. For example, economic productivity is typically a targeted outcome for special education students. However, in times of widespread unemployment within the general population, it may be that program effectiveness should not be restricted to data on actual employment, but should include measures that encompass the acquisition of *employment skills* as well. Further, for some students with severe handicaps, the desirability of paid employment may be diminished if the income from employment makes them ineligible for Supplemental Security Income and Medi-Cal support. Here an important outcome might be the ability to ascertain *when* to work and *how* to live a productive work life outside the context of significant levels of paid employment. Evaluation of employment data must consider the effect on student outcomes of economic factors such as these.

Medical and scientific advances are additional contextual variables that affect special education services. They increase both the survival rate of infants and young children with severe handicaps and their potential to achieve a qualitative life. New technologies are providing important tools for disabled individuals. They can place the curriculum within the reach of students who cannot read, write, see or hear and they also can enhance the employability and independence of individuals with handicaps. Microcomputer technologies lower the costs and increase the effectiveness of some forms of instruction, including compensatory and remedial instruction. In short, the plethora of technological advances hold the promise of diminishing the handicapping nature of many disabilities and normalizing the life and occupational options available to individuals with handicaps.

Educational Policy Issues

Recent attention to the reform and improvement of education has led to an increased emphasis on the rigor of American education. For example, California Senate

Bill 813, the Hughes-Hart Educational Reform Act of 1983, has increased the number of instructional minutes per day and instructional days per year, required a greater number of academic courses for graduation, and calls for higher grading standards for some courses. As a part of the educational reform effort in California, SB 813 directs the Superintendent of Public Instruction to delineate a course of study with a wide range of specific competencies. At both the elementary and secondary levels, model curriculum standards and frameworks in each of the major curriculum areas have been developed, with the California Assessment Program (CAP) designed to measure progress toward achievement of these standards.

The goal of this curricular specification is the attainment of skills in the following areas: (a) basic skills, including language, reading, writing, spelling, mathematics, science and social sciences; (b) communication skills; (c) social/interpersonal skills, including positive attitudes toward self and others; (d) health and physical education; (e) prevocational and vocational skills; (f) art, music and other forms of creative expression; (g) citizenship; and (h) the development of higher order thinking skills. At the district level, the course of studies specifies a sequence of goals and objectives consistent with the State Curriculum Guidelines. A high level of cooperation between special education and general education is required to insure that both the curricula and instructional strategies afforded students with handicapping conditions are reflective of the umbrella core curriculum standards and goals to the fullest extent possible, while at the same time providing flexibility for individual differences.

Cutbacks in other support and compensatory programs within the schools, coupled with the higher achievement standard, have increased the pressure on special education to provide support to a larger portion of the school population. One response to these pressures has been the movement toward increased integration of general and special education programs. Consolidation of categorical programs, encouraged by Assembly Bill 777, the School-Based Program Coordination Act (1981), permits the co-

ordinating, integrating and merging of categorical funds, resources, etc. through alternative funding models. The intent is to provide efficient and cost-effective education to special needs students, to eliminate redundancy and to reduce intrusions on the general school programs.

Within special education, academic and social integration is reflected in the philosophy of Least Restrictive Environment (LRE). The LRE construct centers on assisting every student to become as independent as possible, capable of interacting productively with non-handicapped persons and living a normal life within society. California's LRE policy (1986) sets forth that individuals with exceptional needs typically should attend the same school as non-handicapped students in their neighborhoods, except when the IEP team determines such a setting to be inappropriate to the student's educational and social needs. This policy further states, "Placement other than in a regular education classroom should be considered only when the IEP Team determines that the regular environment, services and/or curriculum cannot be modified effectively to meet the needs of the student as specified in his/her IEP." The policy also requires that a full continuum of program options is available to identified students.

Within the past few years, transition programs have received increased attention. The goals of these programs are to assist handicapped students in making a successful transition to the world of work and in assuming independent living responsibilities. Local districts address the vocational needs of handicapped students in a variety of ways, including adopting and/or adapting portions of their regular vocational education curricula, coordinating with regional occupational programs and offering supported employment programs. Relevant preparation of handicapped students for employment is complicated by the changing nature of occupations. Twenty-five years ago, the half-life of occupations was seven years, meaning that in this period of time, a worker could expect 50 percent of job tasks to change. Today, the half-life of a job is 14

months (Patterson, 1987). This means that past training quickly becomes obsolete and that frequent opportunities for retraining of handicapped individuals are required.

The extent to which any program or service contributes to achieving its mission is related to the availability of qualified personnel to deliver that program. Special education is experiencing significant shortages of personnel, due in part to programmatic growth of two percent a year overall (California State Department of Education, 1986) with a stable nine percent of the total enrollment served by special education (Advisory Commission on Special Education, 1986). Teacher attrition also contributes to personnel shortages. This attrition is influenced by teacher, student and programmatic variables such as teacher retirements, salary competition from other fields, the credentialing structure, the increasing severity of the handicapping conditions served and the increasing cultural-linguistic diversity within the student population. Widespread shortages in the numbers of fully qualified teachers and classroom aides diminishes the potential for program effectiveness.

Effectiveness Indicators

During the several years immediately following the passage of PL 94-142, rapid changes in the educational system resulted in improved access to public education for students with handicaps. With the accomplishment of this major objective, the focus of attention at both state and national levels has moved beyond compliance with basic mandates to a quest for excellence in programs and services provided handicapped students. A variety of publications and research studies have attempted to identify the full range of factors associated with quality special education programs. These efforts, which have included examinations of the major bodies of research and opinion in both general and special education, have led to the identification of many such factors. For instance, *Effectiveness Indicators in Special Education*, a document resulting from a massive effort spearheaded by the MidSouth Regional Resource Center (1986), identified over 600 indicators of program effectiveness; the Los Angeles County Office of Education's *Characteristics of Effective Special Education Programs* (1986) also identified several hundred indicators of program quality. The indicators identified in both documents include structural, administrative and instructional considerations that affect the quality of programs and services for students with handicaps.

For purposes of this report, the Task Force narrowed its focus to specific program features which appear to be most directly associated with the attainment of the targeted student outcomes. It limited its consideration to issues of curriculum, the structure of the instructional setting, and the processes by which instruction is accomplished. This compilation should be considered neither fully comprehensive nor permanent. Ongoing research will continue to add to empirical knowledge, leading to future modifications of this listing.

The 22 effectiveness indicators included in this report are clustered into three categories: 1) Curriculum; 2) Instructional Setting; and 3) Instructional Processes.

1. **Curriculum**
   Each Local Education Agency (LEA) has a comprehensive course of study that is continuously undergoing revision in light of the skills and knowledge students require, research findings concerning scope and sequence of skills and knowledge, and the textbook adoption cycle.

   1.1 The course of study consists of a comprehensive and sequenced set of goals and objectives that students are to achieve as a result of instruction in developmental/academic skills, personal/social skills, and community/economic skills.

   1.2 The course of study includes goals and objectives as well as provisions for adapting materials and modifying instruction to address the needs of students with all types and levels of disability.

2. **Instructional Settings**
   LEA administration, including site administration, organizes and facilitates school activities so as to encourage effective instruction for all students.

   2.1 There is evidence of collaboration between general and special education teachers and other staff in the planning for and provision of educational opportunities to all special needs students.

   2.2 A full continuum of education and related service options is available and utilized to accommodate all special needs students; selection of options is based on student outcome data.

   2.3 Attractive and inviting learning environments are facilitated through both LEA policies and student and staff activities.

   2.4 Each LEA provides opportunities and encouragement for consistent interaction and communication among teachers and parents.

   2.5 The pupil-teacher ratio varies with the intensity and range of handicapping conditions exhibited by the students in a particular setting.

   2.6 There is a process in place whereby documentation of student outcomes and changes in student placement are used to accomplish the goal of teaching students in the least restrictive environment.

   2.7 Special education services are delivered as closely as feasible to the mainstream school and community environments appropriate to the educational characteristics and needs of the individual student.

2.8 Special education classes and general education classes are located within school sites in a manner which facilitates integration, mainstreaming and social interaction.

2.9 All students have equal access to school facilities, equipment and materials, as appropriate and extra-curricular activities or programs.

2.10 Parent education programs/services are available to families of general and special education students.

2.11 General and special education teachers and other program staff demonstrate the necessary skills and training for instructing the students they are assigned.

2.12 Consultation approaches characterize the interactions among special education, general education, other categorical programs and relevant community agencies.

2.13 Ongoing inservice training is designed and revised on the basis of its effectiveness in producing student outcomes and is made available for general and special education teachers and other program staff.

2.14 The instruction provided by general and special education teachers and other program staff is observed regularly and feedback concerning these activities is provided in a way that leads to greater instructional effectiveness.

3. **Instructional Processes**
Instructional strategies are based on evidence of their effectiveness in producing desired student outcomes.

3.1 Placement in the course of study is based on curriculum-referenced assessment and predictions concerning the student's rate of growth in particular skill areas.

3.2 Assessment and instruction are consistent with the IEP goals and objectives and aligned with the course of study.

3.3 Teaching occurs as a series of short "assess-teach-assess" cycles.

3.4 Teaching maximizes appropriate skill generalization.

3.5 A management system is used which reflects each student's progress through the course of study.

3.6 The instructional materials utilized to optimize student learning are selected on the basis of data which demonstrate their effectiveness.

Each of these effectiveness indicators can be viewed as independent variable related targeted student outcomes. Should a program fall short of expectations, these are the practices to be examined in an effort to improve program effectiveness. In their current form, the indicators lack the specificity necessary for prescriptive program development efforts. Appendix A provides illustrations of the more precise interpretations that must be developed to guide program improvement efforts. One Task Force recommendation, included in the final chapter of this report, calls for the State Department to fund the development of a product, or products, that comprehensively delineates each of the effectiveness indicators such that they can serve as a guide in planning and evaluating special education programs and services.

Student Outcomes

The primary purpose of special education is to produce individuals who are independent, contributing and participating members of society. This means that students must acquire skills in the developmental/academic, personal/social and economic/community arenas.

Independent individuals are those who demonstrate economic self-sufficiency in the community and are able to accommodate their basic life needs. Independent individuals exhibit work-related behaviors and life and career planning abilities which result in their being engaged in training and/or gainful employment. Special education is effective when it assists handicapped students to realize their individual and unique potentials for productive work, employment and community living in the mainstream of society.

Contributing individuals are those who exhibit a variety of personal/social skills that enhance the quality of their lives and the lives of others. These personal/social skills manifest themselves in positive peer relations, quality family participation, good health and safety habits, self-care and responsibility for their living environments, social interactions and communications with others, citizenship, recreation and leisure pursuits and positive self-image.

Participating individuals are those who take an active part in their homes, communities and work environments. In addition to the attributes discussed in the preceding paragraphs, the broad array of academic and cultural literacy skills encompassed within the core curriculum contributes to full societal participation.

Specific skills associated with the attainment of these outcomes fall under the categories of developmental/academic factors, personal/social achievements, and community/economic skills. The first of these, developmental/academic factors, reflects the acquisition of the developmental milestones, the core curriculum, cognitive

skills and functional living skills. Personal/social achievements are those evident when individuals are able to relate to and communicate with others, to gain peer acceptance and to attain self fulfillment. Community/economic factors empower individuals to work, live and enjoy recreation in the community and to become fully participating citizens. Included are work behaviors; specific job skills; generic skills for seeking, securing and maintaining employment; skills for obtaining and maintaining independent living situations, utilizing community resources and participating in community activities.

Measures of Student Outcomes

Student progress toward these outcomes should be assessed from early childhood through adulthood in order to determine the effectiveness of program practices. These data can guide ongoing program planning and evaluation cycles, including daily instructional practices, IEP development and overall program design and revision. Categories of outcome measures are listed for each of the three realms of student achievement. Included in brackets are possible approaches for gathering information in each of the areas listed. It should be noted that across all areas, the use of norm-referenced tests with handicapped students is of limited value due to such shortcomings as lack of a direct relationship to core curriculum, the inflexibility of their administration for handicapped students and the lack of universal use. Appendix B provides a discussion of the utility of such measures with special education students.

Developmental/Academic Factors

1. **Developmental Progress**
   Indices include documentation of the progress of handicapped individuals in the following domains: cognition; communication; social interaction; fine and gross motor; self-help; and family interactions. [Parent interviews; direct testing measures using various commercially available instruments and behavioral observations].

2. **Academic Achievement**
The extent to which special education students attain functional skills, basic academic proficiencies, thinking skills and cultural literacy is an indication of the extent to which the program is effective in achieving the goals of education.

2.1 Criterion-referenced and curriculum-related measures, as well as other measures of individual student progress provide specific information on student skills acquisition. [District curriculum expectancies; course completion. Note: The Comprehensive Assessment Systems currently being developed and piloted may become an informal source in this area.]

2.2 Norm-referenced achievement tests are typical measures of these factors for the general school population. [Note: Appendix B provides a discussion of the drawbacks of norm-referenced achievement test scores as measures of program effectiveness in special education.]

3. **Grade Level Promotion**
Student progress, as well as the rate of progress, through the grade levels provides an index of academic achievement. [Review of school records.]

4. **Minimum Proficiencies**
Student acquisition of district minimum proficiencies, the rate of this acquisition, and the method used to demonstrate these proficiencies are relevant indices. [Review of school records; district proficiency standards.]

5. **Graduation/Program Completion**
The percentages of students who either graduate from secondary school or complete their designated curricula is a related criterion. [School record data on percentage of students for each program who meet graduation requirements through the regular and/or differential standards as well as for each the percentages of students attaining some other recognition of program completion.]

6. **Post-Secondary Training Participation**
The percentages of students who enroll in post-secondary training and the levels of success attained by them is an index of program effectiveness. [Parent and student reports; follow-up studies.]

Personal/Social Achievements

1. **Personal/Social Skills**
   Student attainment of personal/social skills in a variety of behavioral areas are encompassed under this heading: health, leisure, interpersonal skills, self-esteem and other aspects of affective development. [Observational ratings and interviews with the students and their parents and/or employers; measures of self-esteem, family and community participation, and degree of independence in living.]

2. **Participation**
   The extent to which handicapped individuals successfully participate in class, school, community and extracurricular activities are indicative of skill attainment in this outcome category. [Review of student records; teacher, parent, student reports; follow-up studies.]

3. **Attendance Patterns**
   The school attendance patterns of handicapped students in both their regular and special education programs indicate levels of personal/social skill attainment.

   3.1 Daily attendance of students with handicaps, including partial day attendance, suggest a level of development in the person/social skills area. [Daily attendance records.]

   3.2 Remaining in school (not dropping out) is another index of success in this area. [School site records; district pupil count records.]

Community/Economic Factors

1. **Independent Living Skills**
   Student success in acquiring independent living skills which allow them to access community services, live independently, recreate, and express their rights as citizens constitute an important outcome category. [School records; behavioral observations and check-lists; follow-up studies; reports/interviews of parents, students and teachers.]

2. **Work Competencies**
   The demonstration of work competencies and occupational skills required for employment and/or work productivity is a dimension of economic productivity.

   2.1. One set of criteria would relate to the development of work-related competencies (e.g., work behaviors, study skills, on-task behavior, specific prevocational skills) while in the school program. [Review of IEPs; naturalistic observation; parent, student, teacher interviews; check sheets; student data-

bases; anecdotal records. Note: The Job Training Partnership Act (JTPA) and similar related efforts may result in useful locally developed criteria. Work competencies also could contribute to these efforts.]

2.2. Another set of criteria could include the acquisition of occupational competencies. [Ascertaining completion of specific training programs and competency verification of acquired occupational skills.]

3. **Employment Record**
The number or percentage of students who obtain employment provides an index of the attainment of major program goals and outcomes. Measures of work productivity must be sensitive to part-time and non-salaried/volunteer endeavors, as well as to the overall economic climate.

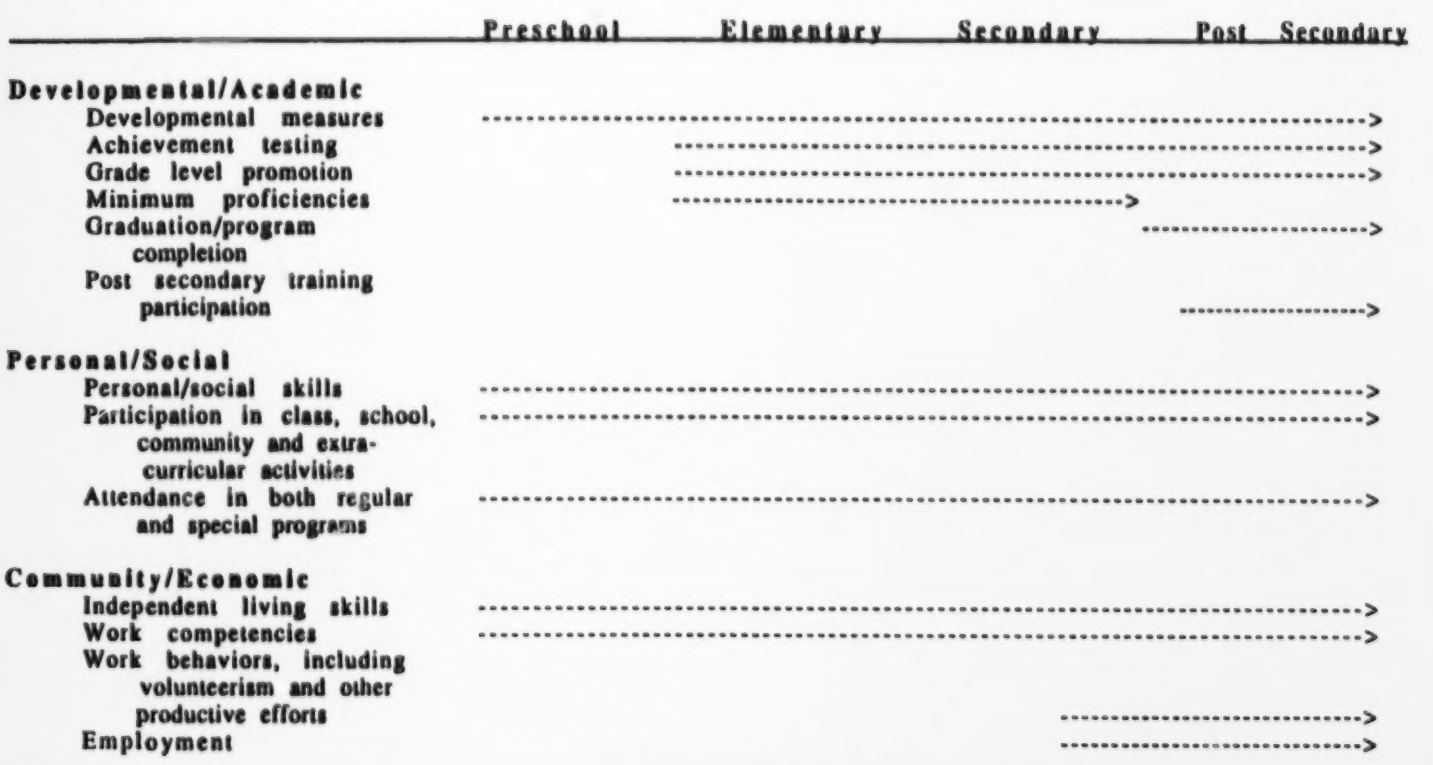
3.1 Factors such as current and past employment status, salary, promotions, job retention, reasons for leaving jobs and others are helpful in ascertaining the level of attainment in this area. [Follow-up studies; student and parent report; employer interviews.]

3.2 These measures should be longitudinal and not applied only immediately after high school graduation. [Longitudinal studies with common design funded in representative regions across the state; analysis of data in terms of regional characteristics and economic climate considerations.]

As indicated by the foregoing listing, the model's focus on student outcomes does not restrict consideration only to summative evaluation at the point of program completion. Student progress is to be continually measured so that program adjustments can be made, when indicated, to ensure progress toward the ultimate attainment of the target outcomes. Figure Two illustrates the skills included in each competency area and the longitudinal nature of evaluation required. Some developmental/academic factors should be assessed from early childhood into adulthood. Others (such as demonstration of minimum competencies and enrollment in and graduation from secondary and post-secondary programs) are of relevance only with older students. Personal/social skills, which develop over a lifetime, as do independent living and work competencies, must be assessed from early childhood through age 21 and beyond. Employment, the last factor depicted, can be assessed only beginning in late adolescence and early adulthood.

FIGURE TWO

MEASURES OF STUDENT OUTCOMES



Note: The dotted lines represent a sequence of skills and outcomes for each area. Progress along each sequence should be measured at least periodically and, in some instances, continuously.

Task Force Recommendations

The model described in the preceding chapters provides a conceptual framework in which to consider questions of the quality and effectiveness of special education programs. Within the context of a program planning and evaluation paradigm, the model focuses on student outcomes and delineates effectiveness indicators associated with the attainment of expected student outcomes. The key issue in program effectiveness is whether or not special education is achieving its program mission and goals. Systematic planning and evaluation is a means of monitoring program outcomes and continuously striving toward program improvement.

The Task Force on Program Effectiveness recommends that the California Department of Education, Special Education Division, take a leadership role in rethinking the ways in which program effectiveness is conceptualized and evaluated. It should do this, in part, by taking the following actions:

1. **Adopt the *Model for Quality Special Education* as the basis for a longitudinal/ visionary approach to program improvement and long range planning.**

   1.1 Use the Model as a framework for continuous planning and evaluation.

   1.2 Advocate planning and evaluation cycles as an integral component of special education at school site, LEA, and state department levels.

   1.3 Develop guidelines to assist LEAs in specifying program goals that communicate expectations for student progress and learning outcomes in a manner that guides the design of curriculum and the selection of instructional materials and strategies.

   1.4 Promulgate techniques of planning and evaluation by developing integrated evaluation approaches that encourage the State Department of Education to work more closely with LEAs and individual school sites to improve program quality and effectiveness.

1.5 Develop procedures for involving in the planning and evaluation processes all stakeholder groups, including those involved in the IEP development and monitoring, school-site planning and self-study, independent program quality reviews, program evaluation, and statewide evaluations of special education services.

1.6 Provide necessary funding to implement program evaluation consistent with the conceptual model.

1.7 Revise Coordinated Compliance Reviews and Program Quality Reviews to include the planning and evaluation elements reflected in the *The Program Effectiveness in Special Education Task Force Report: Model for Program Quality in Special Education*.

2. **Disseminate the conceptual model to all stakeholders.**

2.1 Provide copies of the *The Program Effectiveness in Special Education Task Force Report: Model for Program Quality in Special Education* to LEA directors of special education, school superintendents, community agencies, parent and advocacy groups and other stakeholders.

2.2 Develop guidelines for utilizing the model at all levels of program planning and evaluation.

2.3 Provide information and training about the model at appropriate conferences, institutes and workshops.

2.4 Develop a system for providing technical assistance to LEAs for implementing the model to address statewide questions as well as local conditions, resources and informational needs.

3. **Develop products and procedures to facilitate utilization of the model.**

3.1 As a separate project fund the development of a product or products to describe and delineate effectiveness indicators and to serve as a guide to program planning and evaluation.

3.2 Develop valid and reliable measures appropriate for evaluating specific student outcomes as outlined in this report.

3.3 Develop guidelines for integrating planning and evaluation efforts across all age levels (infants and toddlers, preschoolers, school-aged children and adolescents, and young adults) and across handicapping conditions.

4. **Develop information management systems to collect necessary data on student outcomes both in school and after program completion.**

   4.1 Develop in the State Department of Education a student-level database that is interactive between LEAs and the State Department.

   4.2 Coordinate program evaluation efforts at LEA and State Department levels in a manner consistent with this model.

   4.3 Wherever possible, align the special education reporting systems with regular education reporting procedures and requirements [e.g., pupil count forms, California Basic Educational Data Systems (CBEDS), etc.].

5. **Implement the Model**

   5.1 Select specific student outcomes in developmental/academic, personal/social and community/economic areas as the focus of program evaluation.

   5.2 Assist LEAs to review and refine program practices based on student outcome data.

   5.3 Develop reporting procedures through which evaluation findings are disseminated in a timely and efficient manner to all stakeholders and interested parties.

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APPENDIX A

Effectiveness Indicators

Delineation of Effectiveness Indicators

Recognizing that so-called "effectiveness indicators" are of limited utility in the forms in which they typically are presented, the second recommendation of the Task Force was that the State Department of Education fund the development of a product or products to describe and delineate the effectiveness indicators such that they can serve as a guide to program planning and evaluation. Either printed or mediated documents could provide the level of specification required for the effectiveness indicator statements to become useful guides to program planning and evaluation.

This appendix includes samples of the level of specification that is required. These examples are not comprehensive, nor are they intended to be. Rather, they are included to provide a sense of the task that must be undertaken and completed if the effectiveness indicators developed by the Task Force are to play a meaningful role in the design, delivery and evaluation of special education programs and services in the State of California.

Sample Effectiveness Indicators

Instructional Settings

2.9 Students have equal access to school facilities, equipment, materials, and extra-curricular activities or programs, as appropriate.

EXAMPLES

- **School Facilities**: Every effort is made to educate students at neighborhood schools. Students have equal access to <u>all</u> buildings and rooms within the school, including playing fields (i.e., interactive recess and P.E.), cafeterias, auditoriums and offices.

- **Equipment**: Students have equal access to school equipment to include, but not limited to, typewriters, computers, office equipment, dispensing machines and audio-visual equipment.

- **Materials:** Students have their own copies of textbooks used in the general education courses in which they receive instruction. Art, science, shop, and home economics materials are available for special education students. Special education teachers, as well, have their own copies of teacher's guides, resource materials, etc., which are used by general education teachers in teaching this subject matter.

- **Extra-Curricular Activities or Programs:** Students are informed about and encouraged to participate in extra-curricular activities or programs. LEAs document the degree of student involvement and determine what factors affect this involvement (i.e., prerequisites for student government, clubs, dances, band, drill team, chorus, athletic events, etc.).

Instructional Processes

3.5 A management system is used which reflects a student's progress through the course of study.

The purposes of the management system is: 1) to ensure a direct correlation between the district course of study and the instruction students are receiving in special education; and 2) to provide a monitoring system to ensure that students are afforded equal access to the core curriculum.

The management system should be generic enough to apply to all students regardless of their handicapping condition.

EXAMPLES

(See the following two pages)

Management Profile Form

Grade 3
Book 3

Student Name _____ Date of Birth _____ ID Number _____

Skill Area	Objectives	Mastery and Date					
Addition and Subtraction to 10	Master the addition facts through 10						
	Master the subtraction facts related to sums through 10						
Addition and Subtraction to 18	Master the addition facts through 18						
	Master the subtraction facts related to sums through 18						
	Add three addends having sums of 20 or less						
Problem Solving--Using Your Skills	Solve word problems involving addition facts for sums through 18						
	Solve word problems involving subtraction facts related to sums through 18						
Geometry 1	Identify a point and a line segment						
	Recognize squares, rectangles, triangles, and circles						

Student Name _____ Date of Birth _____ I. D. Number _____

Spelling
Brown Level, Grade 3

Management Profile Form

	Lesson	Skill	School Year Mastered			
Unit 1	Lesson 1	Words spelled with silent e				
	Lesson 2	Words spelled with oa				
	Lesson 3	Words spelled with ou				
	Lesson 4	Plurals using s or es				
	Lesson 5	Plurals of vowel + y words				
	Lesson 6	Plurals of consonant + y words				
	Lesson 7	Irregular plurals				
	Lesson 8	Review				
	Lesson 9	Spelling and the process of writing				
Unit 2	Lesson 10	Words that end with double consonants				
	Lesson 11	Words with double consonants in the middle				
	Lesson 12	Past tense formed with ed				
	Lesson 13	Past tense of final y words				
	Lesson 14	Irregular past tense				
	Lesson 15	The word ending ing				
	Lesson 16	1 + 1 + 1 words with ed and ing				
	Lesson 17	Review				
	Lesson 18	Spelling and the process of writing				
Unit 3	Lesson 19	Words spelled with or				
	Lesson 20	Words spelled with er				
	Lesson 21	Nouns formed with er				
	Lesson 22	The word ending y				
	Lesson 23	The word endings er and est				
	Lesson 24	Words spelled with ear				
	Lesson 25	Words spelled with igh				
	Lesson 26	Review				
	Lesson 27	Spelling and the process of writing				
Unit 4	Lesson 28	Words spelled with silent letters				
	Lesson 29	The prefix un				
	Lesson 30	The prefix re				
	Lesson 31	Contractions				
	Lesson 32	The possessive form of nouns				
	Lesson 33	Words spelled with double consonants + le				
	Lesson 34	Compound words				
	Lesson 35	Review				
	Lesson 36	Spelling and the process of writing				

APPENDIX B
Norm-Referenced Testing

Achievement Test Data and the Evaluation of Special Education Programs

Public school special education programs serve a diverse group of learners. This diversity is evident in the range of handicapping conditions included under the rubric of special education and in the continuum of severity that characterizes each type of exceptionality. It is also reflected in the continuum of services that educational agencies make available to individuals with exceptional needs: services that span the spectrum from residential placement in special schools or hospitals to consultant assistance to general education teachers to facilitate classroom curricular adaptations.

Evaluation of the effectiveness of such a service delivery system cannot be approached from a single perspective. Just as federal law requires that no one procedure be used as the sole criterion for the determination of the educational program for handicapped children and youth, no one index of effectiveness is sufficient to serve as a measure of the worth of such a complex human services system.

If efficiency were the only concern, the choice of measures for the evaluation of special education would be a simple decision. Existing measures would be selected, preferably ones already in use by school systems for the evaluation of some portion of the general education program. Standardized achievement tests, administered regularly through the grades, would be a logical choice. In California, that choice would likely reduce to the Basic Skills Test of the California Assessment Program (CAP) which is administered annually to representatives of grades 3, 6, 8, 10, and 12.

In the evaluation of educational programs, however, efficiency is not the only concern. Efficient means of data collection that produce spurious results are neither useful nor economical. Although standardized tests of academic achievement may serve to support the contention that students identified as handicapped and served in special education do not perform at a level commensurate with that of grade peers, that is all they will do. The results are flawed for the purposes of program evaluation.

There are several reasons for this. First, the domains sampled by standardized tests of academic achievement are school skill domains. While these may be appropriate for students with the milder degrees of some handicapping conditions, they are not appropriate for all students served in special education. Many such students do not pursue academic curricula; their educational goals instead stress such areas as oral language development, self-help and daily living skills, vocational preparation and behavior and social skills. Assessing their progress in academic realms would only show that they had not learned that which they had not been taught, hardly a valid measure of program effectiveness.

Second, standardized tests of academic achievement are group-administered measures. This type of administration unduly penalizes many handicapped students. On group tests, students often must work under timed conditions, write answers on a separate answer sheet, work independently, monitor their own behavior, sustain attention to test tasks and read test questions, even when reading is not the skill area under investigation. Because of these demands, group measures tend to produce a low estimate of the performance of mildly handicapped students (McLoughlin & Lewis, 1986).

Third, academic achievement tests are typically normed on a general school population, with little or no information on the number or type of handicapped students included in the standardization sample (Fuchs, Fuchs, Benowitz, & Barringer, 1987). Also, because handicapped students are characterized by school performance problems, the scores they earn fall within the lowest ranges of test norms. Very low (or very high) test scores tend to be less reliable than scores within the average range (McLoughlin & Lewis, 1986). To paraphrase Cohn, Cohn, and Kanevsky (1988), because a small number of items actually discriminate individual differences at the lower levels of ability, random influences or error can account for more variation among the scores earned by members of the less able group than among the more typical group. In

addition, there is the threat of statistical regression of extreme scores toward the mean (Campbell & Stanley, 1963). Given these potentialities for error, it is obvious that group-administered tests of achievement normed on typical school populations are not an appropriate choice for gathering psychometrically sound data on changes in the skill levels of handicapped students.

Even less appropriate than nationally-normed tests of achievement is the CAP test used in California. This test utilizes a matrix sampling procedure so that students take only a portion of the test. Results are then aggregated to obtain school and district averages. To employ this measure as an index of the effectiveness of special education programs would require substantial alterations in test content to reflect special education curricula, modification of administration procedures (with the development of a range of adaptations tailored to the diverse needs of the handicapped population), and the development of new sets of norms reflecting the types and severity levels of diverse kinds of learning problems. Such revisions would likely result in a less adequate measure of achievement in the general education population and a measure that remains inappropriate to assess the effectiveness of special education programming.

In summary, group-administered standardized tests of academic achievement are best viewed as screening measures, measures whose results prompt general educators to attend to the potential school performance problems of students falling within the lower score ranges. They are not accurate measures of actual skill development in students with handicaps, nor are they appropriate tools for evaluating the effectiveness of special education programs.

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